

BILATERAL INTRAOSSEOUS LIPOMA OF THE CALCANEUS. A CASE REPORT

A. TEJERO, A. J. ARENAS, R. SOLA

A case of bilateral intraosseous lipomas of the calcaneus is presented. The bilateral localization of calcaneal intraosseous lipomas is extremely rare.

Keywords : calcaneus ; bone tumors ; intraosseous lipoma.

Mots-clés : calcanéum ; tumeur osseuse ; lipome intraosseux.

INTRODUCTION

Intraosseous lipoma is a very rare benign tumor of the skeleton, in spite of the abundant adipose tissue found in bone marrow (1-3, 5). Of more than 6000 bone tumor cases reported at the Mayo Clinic, Dahlin observed only five of these tumors (below 0.1% of bone neoplasms) (1). The incidence of intraosseous lipomas involving the calcaneus is even less (15% of all intraosseous lesions) (5) ; they have been described in only a small number of cases (2-5). The occurrence of a lipoma in both calcanei is exceptional. To our knowledge, only two cases have been described in the literature (4, 5).

CASE REPORT

A 49-year-old man with slight trauma by a torsion mechanism in both ankles, sought medical advice in the emergency room. He reported having had no pain in either of the ankles prior to the trauma. His medical record highlighted a blood clotting dysfunction (Von Willebrand disease).

Medical examination suggested a minor sprain of both ankles. A lateral xray film revealed the existence of bilateral calcaneal osteolytic lesions

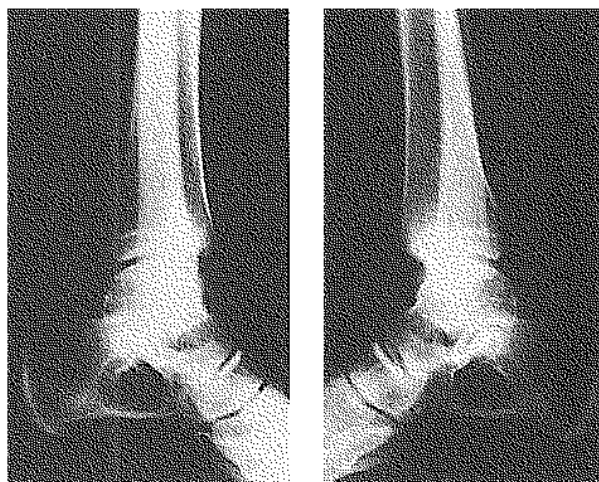


Fig. 1. — Well-delineated osteolytic lesions in both calcanei, consistent with bilateral intraosseous lipomas.

which were well defined and presented with sclerotic borders (fig. 1). A CT-scan was obtained, showing osteolytic lesions in the inferior area of both calcanei, which suggested the diagnosis of bilateral calcaneal lipomas (fig. 2). A percutaneous biopsy using a trocar was performed on both lesions.

Pathologic report

Macroscopic description

Two hard cylinder-like bodies were observed with a length of 1.3 and 1.4 cms and a diameter

From the Department of Orthopedic Surgery, Hospital de Navarra, Irunlarrea, 3, Pamplona-31008, Navarra, Spain.

Correspondence and reprints : A. Tejero, Department of Orthopedic Surgery, Hospital de Navarra, Irunlarrea, 3, Pamplona-31008, Navarra, Spain.

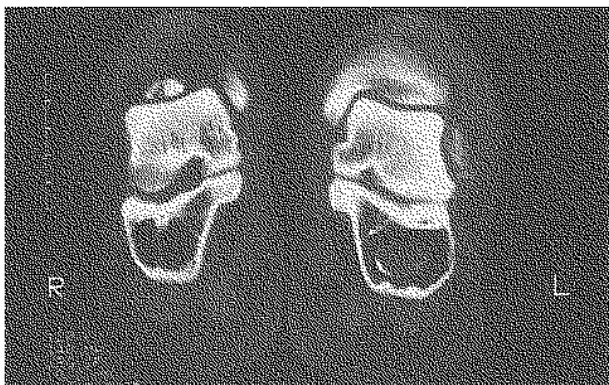


Fig. 2. — CT-scan of both calcanei showing osteolytic areas corresponding to intraosseous lipomas.

of 0.4 cms ; both presented a soft whitish fragment on one of their ends. The rest of the fragments extracted were hard yellow tissue.

Microscopic description

Bone-tissue fragments in which the trabeculae did not indicate any histological alterations worth mentioning. The bone marrow had been completely replaced by mature adipocytes (fig. 3).

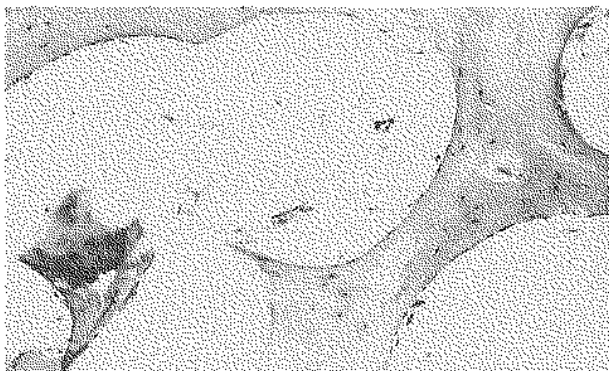


Fig. 3. — Mature adipose tissue located among bone trabeculae of normal appearance (Masson \times 100).

Pathologic diagnosis

Bilateral calcaneal intraosseous lipomas.

Owing to the absence of symptoms prior to the trauma and to a blood-clotting dysfunction, no surgical treatment was judged to be indicated. The

patient was seen two years later ; he stated that he was asymptomatic and suffered no functional impairment.

DISCUSSION

There are three types of lipomas according to their location in bone : periosteal, intracortical and intraosseous or intramedullary (2, 5). Calcaneal lipomas belong to the intraosseous variety and constitute 15% of these lesions (5). The tumors we present belong to this last group.

The symptoms linked to this lesion are usually not specific, and in most cases the lesion is discovered as an incidental finding on an xray study performed in a completely asymptomatic patient. In the reported case, the tumors were discovered on an xray performed by pure chance. Sometimes, the lesion may be diagnosed because of pain and minor local swelling (1, 4).

With regard to treatment, some authors believe that no treatment should be considered for these tumors (1, 5). Several others recommend, if there are any symptoms, carrying out a curettage and filling the cavity with bone graft (2-4). After surgery, no recurrences have been reported, and the prognosis is good (2-4). Our patient preferred therapeutic abstention, and he had no pain, functional problems or recurrences of the lesion two years after their initial detection.

REFERENCES

1. Dahlin D. C. Bone tumors. General aspects and data on 6221 cases. 2nd edition. Charles C. Thomas Publisher, Springfield, 1980.
2. Greenspan A., Raiszadch K., Riley G. M., Matthews D. Intraosseous lipoma of the calcaneus. *Foot Ankle Int.*, 1997, 18, 53-56.
3. Gunterberg B., Kindblom L. G. Intraosseous lipoma. A report of two cases. *Acta Orthop. Scand.*, 1978, 49, 95-97.
4. Niemi W. J., Pressman M. M., Patel S. V. Bilateral intraosseous lipoma of the calcaneus. *J. Am. Podiatr. Med. Assoc.*, 1997, 87, 189-191.
5. Rosenblatt E. M., Mollin J., Abdelwahab I. F. Bilateral calcaneal intraosseous lipomas : A case report. *Mt. Sinai J. Med.*, 1990, 57, 174-176.

SAMENVATTING

A. TEJERO, A. J. ARENAS, R. SOLA. Bilateraal intra-osseus lipoma van het calcaneum.

De lokalisatie en de bilateraliteit van het intra-osseus lipoma van het calcaneum is extreem zeldzaam. Een casus wordt beschreven.

RÉSUMÉ

A. TEJERO, A. J. ARENAS, R. SOLA. Lipome intra-osseux calcanéen bilatéral. Présentation d'un cas.

Les auteurs rapportent un cas de lipome intra-osseux calcanéen bilatéral, traité de façon conservatrice avec un bon résultat.